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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,336	07/18/2003	Joseph M. Piana		2507

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EXAMINER
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DUDA, RINA I

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/621,336

Applicant(s)

PIANA ET AL. 

Examiner

Rina I Duda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/28/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Adams et al (US Patent 3913153).

Adams et al teach a control system for a hospital bed comprising a microprocessor 17 and control logic 18 for driving a plurality of motors 11-13 that adjust the position of the bed, and a power source connected to leads 31/32, which is transformed to appropriate voltage levels to power the different electronic elements.

Claim 2, Adams et al describe in column 5 lines 18-29 that the voltage applied to leads 31/32 lies within 115 to 120 volts AC and 90 to 130 volts.

Claim 4, Adams et al teaches that they electronic controller would move the bed based on information from the position indicating means, therefore is inherent the logic/master circuits includes some form of memory device in order to store positions occupied by the various parts of the bed.

3. Claims 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fromson (US Patent 5600214).

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Fromson teaches an adjustable bed comprising microcomputer/control logic 80 for driving a plurality of motors 24/25/28/29 and a receiver 43 for receiving command signals from a remote control 32.

Claim 14, Fromson describes memory 82 for receiving and storing operational information.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US Patent 3913153).

Adams et al discloses the claimed invention except for a means for connecting two bed controllers. It would have been obvious to one person of ordinary skill in the art at the time of the invention was made to connect two different controllers for operating the bed, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *Regis Paper Co v. Bemis Co*, 193 USPQ 8.

6. Claims 5, 6, 9, 20, 21, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US Patent 3913153) and Smith et al (US Patent 6544200).

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Claims 5, 6, 9, the difference between Adams et al and the claimed language of claim 5 is that claim 5 recites connecting the bed controller to a detection system that is mounted on the frame of said bed.

Smith et al teaches a controller for a hospital bed comprising a series of sensing means 400 mounted on the bed for detecting the presence of patients by detecting an ambient temperature change inside the bed.

Claims 20, 21, 23, and 24, Adams et al describe an adjustable bed and motors for adjusting the position of the bed. Smith et al describe various detection systems for detecting the presence of humans inside the bed by detecting an ambient temperature change inside the bed. Smith et al shows in figure 1 and 4 the detection systems being enclosed

Therefore, it would have been obvious to one person of ordinary skill in the art to connect a plurality of sensors to a bed, since said sensors would provide a caregiver with a monitoring system that detects changes in the state of a patient.

7. Claims 11-13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fromson (US Patent 5600214).

Fromson discloses the claimed invention except for the frequency range. It would have been obvious to one person of ordinary skill in the art at the time of the invention was made to choose the frequency between 418Mhz-433Mhz, since it has been held that where the general condition of a claim are disclosed in the prior art,

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discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Fromson discloses the claimed invention except for a means for connecting two bed controllers. It would have been obvious to one person of ordinary skill in the art at the time of the invention was made to connect two different controllers for operating the bed, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *Regis Paper Co v. Bemis Co*, 193 USPQ 8.

8. Claims 7, 8, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US Patent 3913153) and Smith et al (US Patent 6544200) as applied to claims 5, 6, and 9 above, and further in view of Lee (US Patent 5742055).

The difference between claim 7 and the teachings of Adams et al and Smith et al is that claim 7 requires that the detection system being a pyroelectric sensor.

Lee teaches a device for sensing the position of a human body using infrared sensor 12.

It would have obvious to choose to use a pyroelectric sensor for sensing the presence of humans inside the bed frame, since pyroelectric sensors sense changes in temperature that could be produce the movement of a human on the bed.

Claim 8, Smith et al and Lee describe enclosures for their detection systems.

9. Claims 15, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fromson (US Patent 5600214) and Smith et al (US Patent 6544200).

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Claims 15, 16, and 19, the difference between Fromson and the claimed language of claim 5 is that claim 5 recites connecting the bed controller to a detection system that is mounted on the frame of said bed.

Smith et al teaches a controller for a hospital bed comprising a series of sensing means 400 mounted on the bed for detecting the presence of patients by detecting an ambient temperature change inside the bed.

Therefore, it would have been obvious to one person of ordinary skill in the art to connect a plurality of sensors to a bed, since said sensors would provide a caregiver with a monitoring system that detects changes in the state of a patient.

10. Claims 17 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Fromson (US Patent 5600214) and Smith et al (US Patent 6544200 as applied to claims 15, 16, and 19 above, and further in view of Lee (US Patent 5742055).

The difference between claim 17 and the teachings of Fromson and Smith et al is that claim 17 requires that the detection system being a pyroelectric sensor.

Lee teaches a device for sensing the position of a human body using infrared sensor 12.

It would have obvious to choose to use a pyroelectric sensor for sensing the presence of humans inside the bed frame, since pyroelectric sensors sense changes in temperature that could be produce the movement of a human on the bed.

Claim/8, Smith et al and Lee describe enclosures for their detection systems.

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11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The documents cited in form PTO-892 describe other controllers for controlling an adjustable bed.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rina I Duda whose telephone number is 571-272-2062.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached at 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RD

  
RINA DUDA  
PRIMARY EXAMINER